

**Maryland Coast Smart Council**  
**July 30, 2018**  
**11:00 am – 12:00 pm**  
**DNR Meeting Notes**

Tawes State Office Building  
Conference Room C-1  
580 Taylor Ave  
Annapolis, MD 21401

*Attendance:* Mark Belton (DNR), Ben Grumbles (MDE), Nancy Kopp (MD Treasurer), Shiela McDonald (BPW), Paul Pinsky (MD Senator), Dana Stein (MD Delegate), Gary Setzer (MDE), Matt Fleming (DNR), Dave Guignet (MDE), Catherine McCall (DNR), Joseph Abe (DNR), Kim Hernandez (DNR), Kate Charbonneau (DNR/CAC), Alexandra DeWeese (DNR/CAC), Allison Gost (MDH), Andrew Asgarali-Hoffman (MEMA), Astrid Caldas (Union of Concerned Scientists), Brian Ambrette (Eastern Shore Land Conservancy), Chas Eby (MEMA), Chris Elcock (GWWO), Dave Nemazie (UMCES), Peter Goodwin (UMCES), David Andreasen (DNR/MGS), David Bohannon (BPW), Debbie Herr Cornwell (MDP), Drew Budelis (Versar), Elizabeth Habic (MDOT/SHA), Emily Vainieri (OAG/DNR), Fredrika Moser (Maryland Sea Grant), Gerald Galloway (UMD-College Park), Jackie Specht (DNR), JaLeesa Tate (MEMA), Jason Dubow, Jennifer Raulin (DNR), Jill Lemke (MD Port Administration), Jim George (MDE), John Brush (DGS), Kevin Brown (Ocean City), Lisa Nissley (MDE), Margie Brassil (MDGA), Mary Phillips (Somerset County), Megan Granato (DNR), Michael Bayer (MDP), Nicole Carlozo (DNR), Richard Higgins (Commerce), Zoe Johnson (DoD), Ian Ullman (Sen. Pinsky), Sam Kahl (MDOT/SHA), Lowell Brazin (MDOT/SHA), Hannah Brubach (MDE), Paola Ariza (MTA), Susanne Biloghn (?), Nick Kelly (DNR/CAC), Charlotte, Shearin (DNR/CAC), Dorothy Morrison (MDOT), Walt Zalis (Energetics), Tom Perrot (Energetics)

*Conference Phone:* Angelica Bailey (Maryland Building Industry Association), Fiona Burns (DBM), Kevin Wagner (MDE)

11:03 am Meeting Began

**Agenda Item #1**

Welcome and Announcements

- Secretary Belton provided welcome
- Introductions around the room

**Agenda Item #2**

SB 1006 (HB 1350) – Sea Level Rise Inundation and Coastal Flooding – Construction, Adaptation, and Mitigation

- Powerpoint presentation by Sasha Land
  - New title for legislation is *Sea Level Rise Inundation and Coastal Flooding*
  - Bill was passed by the General Assembly in 2018, signed by Governor Hogan in late May, and went into effect July 1
  - An overview was provided for Parts I through VI (*notes can be provided if needed*)
- Context setting by Senator Pinsky and Delegate Stein
  - The delegate and senator have participated in mitigation discussions through the Maryland Commission on Climate Change (MCCC) and thought that additional coordination is needed on mitigation actions

- Two Washington Post articles that were provided to the Council and specific quotes read. The news articles and issues faced by local communities, including Crisfield and Hampton Roads, were credited with driving forward the legislation.
  - “Climate Change is Supercharging a Hot and Dangerous Summer” (Joel Achenbach and Angela Fritz; July 26, 2018)
    - “Gone are the days when scientists drew a bright line dividing weather and climate. Now researchers can examine a weather event and estimate how much climate change had to do with causing or exacerbating it.”
    - “Overall precipitation has decreased in the South and West and increased in the North and East. That trend will continue. The heaviest precipitation events will become more frequent and more extreme. Snowpack will continue to decline. Large wildfires will become even more frequent.”
    - “Climate change hits us at our Achilles’ heel. In the Southwest, it’s water availability. On the Gulf Coast, it’s hurricanes. In the East, it’s flooding. It’s exacerbating the risks we already face today.”
  - “This Coastal Town’s Battle Against Sea-Level Rise Could Offer Lessons for Others” (Patricia Sullivan; July 27, 2018)
- The delegate and senator used the DNR website and map layers, including sea level rise (SLR) and categories of storm impacts to look at flood encroachment across the state. Our map tools don’t show the impacts of SLR and storms together. The hurricane impacts to Houston have taught us that the combination of SLR and storms creates a new monster. The delegate and senator believe it’s time to consider both together, especially since we are investing tax revenues in highly vulnerable areas.
- Their intent was to more tools and strategies going forward. If a road or school is built for a 50 year anticipated lifespan, and we get the best mitigation achieved per the Paris agreement, we still have problems ahead of us. This legislation will reduce waste of taxpayer dollars on facilities that won’t be able to be used 15 or 20 days of the year.
- The delegate and senator can make changes to the legislation in January 2019 if it needs to be fine-tuned – they recognize that it is not perfect.
- Elements of the bill
  - Added highway facilities to the Coast Smart purview as an added area of responsibility going forward. The intent is to address roads like Route 404, which could be under water in 20 years. Roads built for 50 years should be useable for that lifespan.
  - Siting criteria needs to include at least SLR and category 2 storm surge
  - The formula of which projects this should apply to is projects that are at least 50% state funded and have a minimum total cost of \$500,000. Regarding the minimum cost, they do not want us to “dilly dally” with small projects and request advice on whether this threshold needs to be changed.
  - Added State Treasurer to CSC
  - Saltwater intrusion (SWI) is the hidden side of climate change. They want to defer to the state agencies on how to adapt to SWI and as a result didn’t include planning criteria.
  - They may have caused some confusion in the state mitigation part. They are referring to structures (natural and manmade) to push back or resist

encroaching SLR, such as pumps, dredging, marshes, and living shorelines. They can provide clarification on what state mitigation entails

- They wrote this section anticipating requests from entities (such as Smith Island) as SLR consumes acreage. States hit by superstorms are already needing this type of assistance.
- Adaptation might be better term than mitigation
- They realize that state does already provide some funding, but anticipate that billions of dollars will need to be provided
- Real property disclosures article was removed
- Waiver language was put in to add flexibility, but don't want it to be get out of jail free card. It is intended to help with unique circumstances

### **Agenda Item #3**

#### Q&A and Discussion

- Application of the funding criteria
  - Secretary Belton: Does the funding criteria apply to all projects or capital projects?
  - Answer: The intent was that it applies to capital projects – structures or highway facilities
- Structure definition
  - Secretary Belton: The word “structure” can be nebulous. Examples of structures funded through the Trust Fund were given.
  - Answer: We can refine our thoughts of “structure.” The definition of “structure” is provided. If needed, the legislation can be revised to state that they are capital structures.
- Nuisance flooding plan comments – They had a long back and forth with MACO, and wanted to provide a starting point to get jurisdictions thinking about nuisance flooding. They did not provide set criteria or elements that each plan must address, as it should be tailored to each locality. If there is foot dragging, they may have to add criteria in 5 or 8 years.
- Jason Dubow (MDP): State level guidance might be needed to help inform the jurisdictions.
- Sheila McDonald (Board of Public Works): Board of Public Works will act as coordinator for the state mitigation work, and recognize that the other agencies will provide substance
- Matt Fleming: The maps referenced reflect state agency data. We have the in-house capabilities to expand tools and make them more user friendly. We also have the ability to combine SLR and category 2 storm surge, and will begin to develop this for local governments. Training can be provided through the Maryland Climate Leadership Academy.
- Treasurer Kopp: The work to be done as a result of this legislation will help to build up a framework for everyone to be more aware of diversity of players and similarities in goals on these issues – we are not different teams. It is normal for bills such as these, which will be integrated across agencies, to require discussion. Someone from capital/operating budget should be involved (*it was confirmed that Fiona Burns from DBM was participating on the phone*).

- Secretary Grumbles: This is a tremendous opportunity for creativity on adaptation through Secretary Belton’s leadership and key players on CSC. The MDE standpoint is planning, infrastructure, and regulation. Programs speak to this need. The key is to develop collaborative criteria that is science based and achievable, and then integrate it into various programs at state and local levels. Climate change is water change, and on October 10 the state is hosting workshop with Israel on water reuse, water supply, subsidence, and security issues. This is an example of how the state is recognizing that future is water.

### **Non-Agenda Item – Head Start on first item of Adaptation & Response Working Group Meeting**

Review of key actions and next steps for Part III – Coast Smart Design and Siting Criteria – by Joe Abe

- Prior to the bill, the reference point for vulnerability was based on location within the special flood hazard area (SFHA), areas prone to 100-year floods. This is the standard reference for the National Flood Insurance Program (NFIP). Maryland’s Coast Smart guidelines require that the first floor elevation of structures within a SFHA be at least 2 feet of above the 100-year base flood elevation. The additional 2 feet safety factor is commonly known as freeboard. The legislation apparently intends to set a more aggressive reference for vulnerability assessment. Abe requested that Dave Guignet weigh in on the situation.
- Discussion on setting new design standards
  - Dave Guignet (state NFIP coordinator, MDE): We need to consider what information is available to us. Map updates occur frequently – we now have 1 ft DEMs, used to be 2-4 ft DEMs. Floodplains can be defined multiple ways based on what data is used. The category 2 storm level is a 15 ft topo gradient that hasn’t been updated in many years. Floodplain regulations are more up to date. Combining category 2 storms with floodplain regulations is like combining apples and oranges.
  - Senator Pinsky: They don’t want us to invest time and money in the category 2 storm layer if it is outdated. They want to get the criteria right and are open to input on defining the new standard. They want storm surge and SLR to be considered together but a different framework could be used and the language can be cleaned up. Don Boesch and others advised them to focus on category 2 storm impacts because category 2 storms are likely to hit the eastern shore.
  - Peter Goodwin (UMCES): This is a good opportunity for the science community to help define the new standard. Flooding impacts are not simple, and depend on many factors and preceding conditions.
  - Gerald Galloway (UMD) pointed out that state of Illinois had found that 90% of urban flood losses were outside of the 100 year floodplain. The Commission to Rebuild Texas (after Harvey) is using Maryland documents on coastal activity standards and looking to our state for advice.
  - Dave Guignet (MDE): Sizing everything on 100 year storms and adding in a factor of safety makes this an apples to apples comparison, as opposed to having to focus on category 2 storms

- Secretary Belton: a workgroup should be convened to work on these issues further
  - Available tools
    - Brian Ambrette (ESLC): He is working with 5 communities on the eastern shore to develop sea level rise scenario maps that include the 100 year storm and damage predictions to addressable structures, which should be completed in the next few months.
    - Astrid Caldas (Union of Concerned Scientists): She agrees that it is a useful exercise to overlay storm surge and SLR, and the UOCS has done so for Annapolis.
    - Elizabeth Habic (MDOT SHA): SHA has statewide maps for projected sea level rise (2050 and 2100) and storm impacts ranging from the 10 to 500 year storm. These have been added to their viewer in the last few months.
    - Chas Eby (MEMA): MEMA and US Army Corps of Engineers are working on a feasibility study for storm evacuation, which may have data that would be useful to this effort
    - Dave Nemazie (UMCES): UMCES is charged with developing new SLR projections past 2100 and will be meeting with experts in October. He will provide an update in the next meeting.
  - Catherine McCall (DNR): The next meeting until December, so it would be helpful to identify members willing to discuss mapping criteria and range in the meantime.
    - Sandy Hertz (MDOT)
    - Elizabeth Habic (MDOT SHA)
    - Chas Eby (MEMA)
    - Dave Guignet (MDE)
    - Dave Nemazie (UMCES)

12:00 pm: Meeting adjourned and participants were invited to lunch.